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The Weyerhaeuser Company comments on proposed revisions to WAC 173-201A *Water Quality Standards for Surface Waters* (Washington State Register 15-03-015), and the many supporting documents, are provided below.

At the outset, the Water Quality Program should again be complimented for a sustained, highly professional and transparent public involvement process on this regulation development activity. The quality of the agency work and commitment to engage willing stakeholders over these last three years has been exceptional.

Weyerhaeuser has participated in the development of and fully endorses the comment packages prepared by the Northwest Pulp and Paper Association¹ and the National Council for Air and Stream Improvement². These submittals are very extensive and, taken together, provide legal and science analysis on the key decision criteria framing the proposed rule. Many suggested changes/improvements to the proposed rule text are offered and supported in these comments.

General Comments on Proposed WAC 173-201A *Water Quality Standards for Surface Water*

1. Weyerhaeuser conditionally supports the proposed human health water quality criteria (HHWQC)

Weyerhaeuser generally supports the proposed revisions to the HHWQC presented in WAC 173-201A-240 *Toxic Substances*. There are some qualifications to this statement and those are presented in this letter.

2. Weyerhaeuser supports inclusion of the regulatory Implementation Tool concepts

¹ "Northwest Pulp and Paper Association Comments on Draft Human Health Water Quality Criteria for the State of Washington," submitted by Chris McCabe, March 23, 2015.

² "Comments on Proposed Human Health Criteria and Implementation Tools Rule Proposal dated January 12, 2015," submitted by Steve Stratton, National Council for Air and Stream Improvement, March 20, 2015

Similarly, Weyerhaeuser supports the regulatory concepts expressed in the so-called Implementation Tools. This includes the amendatory language for Variances in WAC 173-201A-420 and Compliance Schedules in WAC 173-201A-510, and new regulatory language addressing Intake Credits in WAC 173-201A-460. There are concerns that the proposed rule language is overly prescriptive or cannot (or will not) be efficiently implemented by Ecology to accomplish the intended regulatory concept. Comments on and suggestions for regulation language improvements are provided in this letter.

3. Our conclusion is that Washington's water quality standards submittal to EPA will achieve the 40 CFR 131 "minimum requirements" and therefore must be approved by EPA

40 CFR 131 *Water Quality Standards* defines the authority and roles for the development and approval of state water quality standards. We note that in 40 CFR 131.4 "states...are responsible for reviewing, establishing, and revising water quality standards." 40 CFR 131.5 describes EPA's authority to review and approve/disapprove state-adopted water quality standards, and articulates the decision criteria by which EPA is bound. 40 CFR 131.6 identifies the "minimum requirements" for a water quality standards submission to EPA.

Weyerhaeuser's review of this proposed regulation (Washington State Register 15-03-015) yields a conclusion that the necessary elements to gain EPA approval of the revised water quality standard are demonstrated. We trust Ecology will give full consideration to the comments received during this public involvement phase, will perhaps adjust certain regulation sections in response to public comments, and that the final adopted rule will also achieve the minimum requirements for a water quality standards submission.

We expect the state of Washington will describe and position its submittal of water quality standards to EPA as meeting the necessary criteria in 40 CFR 131.5 and 40 CFR 131.6, and assert per 40 CFR 131.5(b) that EPA must therefore approve the standards.³

4. Washington's Water Quality Standards submittal to EPA must be evaluated and approved as a cohesive package.

Ecology should make clear the WAC 173-201A revisions eventually adopted will be submitted to EPA as a cohesive package on which that agency should make its approval/disapproval decision. Again, approval criteria are described in 40 CFR 131.5 and .6. Washington's task is to demonstrate how the water quality standards submittal satisfactorily achieves those regulatory criteria. If EPA chooses to disapprove any single element of the package and identifies needed changes (and the state concedes that a

³ We suggest the EPA Region X ideas on "endorsed" FCR, demand for 10e-6 incremental excess cancer risk, other agency guidance, environmental justice, federal trust responsibilities, tribal treaty rights, and probably other considerations, as presented in the Dennis McLerran December 18, 2014 letter to Maia Bellon, and other EPA communications through 2014, are advisory only and not prerequisites for judging achievement of regulatory criteria in 40 CFR 131.

regulation-based deficiency exists), Ecology would be obliged to re-propose the WAC 173-201A with a fresh APA CR-101 and CR-102 process, updated Significant Legislative Rule analysis, etc.^{4 5} This would not be a good outcome for Washington. Ecology should position its water quality standards submittal to EPA to avoid this possibility.

5. HHWQC should be derived based on best available science

The federal water quality standards regulation grants states flexibility to make policy choices and/or risk management decisions in developing water quality standards so long as the minimum requirements in 40 CFR 131.6 are demonstrated. The state of Washington has exercised this authority, as for example to base the selection of fish consumption rate on “highly exposed populations,” or in the choice of the incremental excess cancer risk level, or with Governor Inslee’s risk management directive that “no new criterion concentration should be less protective than the existing NTR criterion concentration.” These are judgments made for political or public relations reasons.

While Weyerhaeuser generally supports the outcome of Washington’s water quality standards revision process, we also favor the use of sound science or best science in the setting of regulatory requirements. Washington has not used the best available science in this process, with the result being the derivation of more stringent toxic pollutant criteria than necessary to adequately protect Washington citizens. Examples include:

- HHWQC computed from a deterministic derivation model result in overly conservative (health-protective) numeric criteria.⁶ While EPA recommends the use of point parameter values that are a “combination of median values, mean values, and percentile estimates [that target] the high end of the general population,”⁷ Ecology has generally selected the upper end or maximum possible values for parameters in the criterion derivation equations. These choices together yield an inevitable “compounded conservatism” in the resulting HHWQC; i.e., numeric criteria whose actual level of protection greatly exceeds that necessary to protect all fish-consuming population groups in the state.
- Ecology could have chosen to use a probabilistic risk assessment approach to derive HHWQC. The attributes of a probabilistic methodology are undeniable, a reality

⁴ Per RCW 34.05.340 *Variance between proposed and final rule*

⁵ The assumption here is that an EPA disapproval will lead to yet more overly-protective, stringent HHWQC

⁶ For a thorough discussion on the extraordinary protectiveness which a traditional deterministic derivation process will yield, consider “A Review of Methods for Deriving Human Health-Based Water Quality Criteria with Consideration of Protectiveness,” NCASI, August 2012 (previously submitted to the WDOE). A companion paper is “Derivation of Human Health-Based Ambient Water Quality Criteria: A Consideration of Conservatism and Protectiveness Goals,” Tatum, Wiegand, et.al., accepted for publication in Integrated Environmental Assessment and Management, SETAC, Volume 9999, Number 9999, September 2014 (article enclosed)

⁷ USEPA, “Methodology for deriving ambient water quality criteria for the protection of human health (2000). Washington DC, EPA/822/B-00/004

acknowledged by EPA across many regulatory programs.⁸ This approach accounts for variability within populations by allowing for exposure parameters to be defined as distributions of input values. With reasonable data inputs, risk management decisions can then be made to select protective HHWQC for all segments of the state population. In general, HHWQC will be less stringent than National Toxic Rule criteria or criteria proposed in this rule-revision, but there will be a more robust science base to know the criteria are protective of all Washington residents. It must be noted that a computer-based tool and reasonable data input distributions to accomplish a probabilistic derivation of HHWQC, was shared with Ecology in February 2014 with a request to utilize it in the current rule revision activity.⁹ While acknowledging that Washington had discretion in its choice of HHWQC development methods, it is disappointing the superior probabilistic methodology was given so little consideration by the agency.

- Ecology's choice of 175 gr/day of fish/shellfish consumption is, in fact, not "representative of average FCR's... for highly exposed populations."¹⁰ Rather, this value represents approximately the 95% percentile of tribal fish consumption based on non-verified Washington-specific tribal studies. Further, if science-based adjustments are made for consideration of pollutant accumulation by salmonids in waters of the state only, the average FCR for highly exposed populations is lower yet.¹¹ As currently used, Ecology's choice of 175 gr/day FCR means the proposed HHWQC for the 6.7 million residents of Washington will be based on a few thousand of the highest consuming individuals in the state. When paired with other very conservative point values in the deterministic derivation process, the result are extraordinarily protective HHWQC.

Ecology may be tempted to assert that "overly-stringent" HHWQC deriving from the deterministic model will have no meaningful consequence to the Clean Water Act program implementation in the state. The agency asserts, for example, in the "Preliminary Cost-Benefit and Least Burdensome Alternative Analyses,"¹² that the proposed rule (incorporating the very stringent criteria) will have no benefit/cost impact to current or future dischargers and cleanup sites now and for the next 20 years. The logic would be that less stringent HHWQC based on sound science would be even less likely to have any effect on current/future CWA program implementation. We would caution that Ecology's

⁸ See, for example, "Risk Assessment Forum White Paper: Probabilistic Risk Assessment Methods and Case Studies," EPA/100/R-14/004 July 2014

⁹ "Derivation of Alternative Human Health-Based Ambient Water Quality Criteria Using Probabilistic Methods for the State of Washington," Arcadis, February 4, 2014. Shared in a letter from Chris McCabe, NWPPA, to Kelly Susewind, WDOE, February 4, 2014.

¹⁰ "Washington State Water Quality Standards: Human Health Criteria and Implementation Tools – Overview of Key Decisions in Rule Amendment," Page 17, WDOE Publication No. 14-10-058, January 2014

¹¹ "Comments on Proposed Human Health Criteria and Implementation Tools Rule Proposal dated January 12, 2015," NCASI, March 23, 2015

¹² "Preliminary Cost-Benefit and Least Burdensome Alternative Analyses," Dept of Ecology Publication No. 14-10-056, January 2015

analysis on this matter is static, incomplete and borderline naive. A more inquisitive evaluation would reveal that more stringent numeric water quality criteria will certainly have program implications over time.¹³

6. Some stakeholder groups lack understanding on basic principles relating to health risk, risk management, and the fundamentals of water quality standards development needed to ensure protection of human health. This is despite the efforts Ecology has made throughout this HHWQC development process to address these matters. The continuing experience with this toxic pollutant development process suggests a more energetic and creative outreach to these groups, offering education and perspective on this important subject, would be beneficial in gaining broader public support. For example, Ecology can expect media inquiries and will be responding to comments on this proposed regulation which challenge the health protectiveness of the proposed/adopted HHWQC. Any response mentioning only the fish consumption rate or incremental excess cancer risk rate will miss the bigger and more important story about true risk and relative risk..

The Northwest Pulp and Paper Association commissioned a white paper titled "*Summary of Health Risk Assessment Decisions in Environmental Regulations*," Arcadis, March 6, 2015 (enclosed). The presentation of risk management concepts, practical perspectives and realities, may provide some value to Ecology in its communication outreach.

7. Polychlorinated biphenyls is a very challenging pollutant group. Unintended consequences or mis-steps in implementing the water quality criterion across Clean Water Act programs could create much turmoil. There is a need for Ecology to be thoughtful and strategic with this pollutant. Many factors (with some continuing to evolve) are in play, and include: water sampling methodologies and analytical methodologies (approved and unapproved) for NPDES permittees and ambient water, the database of PCB concentrations in ambient waters, the discretionary policy and regulatory judgments on PCB fish tissue samples, implications of PCHB and federal district court rulings to CWA program implementation, pollutant removal technology capability and cost, and more.

New information and the eventual adoption of these WAC 173-201A revisions will create an option for responsibly addressing PCBs while minimizing the possibility of unwanted consequences arising from new data or judicial decisions.

If the option for a waterbody variance for a geographic stretch of water is adopted (proposed WAC 173-201A-420(2)(c)) then Ecology should consider developing a PCB

¹³ Note the recent blog article titled "Underwater: Oregon's agency responsible for monitoring waterway polluters is the most backlogged in the country," news.streetroots, February 24, 2015. There are a number of contributing factors to the Oregon DEQ performance, but the intimidating and impossibly stringent toxic pollutant water quality standards which emerged from the 2011 regulation revision is one reason. As the database of ambient water quality data and NPDES permittee pollutant data fills out in coming years, developed with more robust 40 CFR 136 analytical methods, expect Oregon's delivery of Clean Water Act programs to be further choked.

variance for the human health criterion to extend to all state waters. The core of the regulatory response to address PCBs will point to the recently-issued PCB Chemical Action Plan.¹⁴ This document represents the best thinking of Washington state government on what can be done to reduce PCB releases to the environment. Energetic implementation of the “Recommendations for New Action” should be pursued. These recommendations offer a superior approach to what is available through the Clean Water Act. The variance should be for a minimum 10-year period. The acute and chronic aquatic life criteria for PCBs would still be implemented through CWA programs.

Specific Comments on proposed WAC 173-201A *Water Quality Standards for Surface Water*

- 1) WAC 173-201A-240(3) and (5)(a), and new Table 240 – Please confirm that this regulation revision process does not intend to, and does not, propose any changes to “aquatic life protection” criteria.

Discussion – These three subsections relocate the references and reformat the presentation of aquatic life protection criteria in this rule. There are, however, no changes in the actual numeric criteria in Table 240 or the explanatory footnotes. We understand Ecology will rely on a future triennial review process to gather information and establish a work scope to consider possible changes to aquatic life protection criteria.

- 2) WAC 173-201A-240(5)(a) – Text in this subsection could be repositioned to more accurately reflect Ecology’s obligation and commitment with future aquatic life and human health criteria revisions.

Discussion – Text in (5)(a) addresses aquatic life protection criteria and reads

“The department shall formally adopt any appropriate revised criteria as part of this chapter in accordance with the provisions established in chapter 34.05 RCW, the Administrative Procedures Act. The department shall ensure there are early opportunities for public review and comment on proposals to develop revised criteria.”

This commitment is not exclusive to aquatic life protection criteria discussion. It applies equally to Human Health protection criteria. Ecology should consider moving this text to the parent (5) section to make this clear.

- 3) WAC 173-201A-240(5)(b) and Table 240 footnotes “C” and “F” – The inclusion of the specific fish consumption rate, exposure duration, and incremental excess cancer risk level used for deriving HHWQC, should all be removed from the rule text. There is no inherent value in presenting just these three parameters and point data values used in deriving the

¹⁴ “PCB Chemical Action Plan,” WDOE and WDOH, Publication No. 15-07-002, February 2015

HHWQC, to the exclusion of many other parameters/values. What is obviously important is the listing of actual numeric criteria in WAC 173-201A.

Discussion – Ecology should be content to rely on the “*Washington State Water Quality Standards: Human Health Criteria and Implementation Tools – Overview of Key Decisions*”¹⁵, to reveal details on the HHWQC derivation methodology and choice of input values. This document could be included as part of the water quality standards submission to EPA to demonstrate the sufficiency and approvability of water quality standards.¹⁶ To list just the FCR, exposure duration and excess cancer risk parameters and data values will encourage comments on those values, or the HHWQC derived from the parameter values, or to question why other important parameter/input values were not presented in regulation text. For example, EPA might consider each parameter and data value worthy of a separate approval/disapproval decision. A disapproval determination on any aspect of the derivation process would compromise the integrity of the HHWQC package.

4) Table 240 Toxics Substances Criteria – The “Category” column could be deleted.

Discussion - There is no compelling regulatory reason to present a qualitative identification of a Compound/Chemical by pollutant category. For example, there is scant value in identifying that Antimony is in the “Metals, cyanide and total phenols” Category.

5) Table 240 Toxics Substances Criteria – Weyerhaeuser supports the proposed numeric criteria for total arsenic and total mercury.

Discussion – A proposed 10 ug/l total arsenic criterion, based on the federal Safe Drinking Water Act MCL, represents a pragmatic accommodation. That EPA has approved this criterion in many states is encouraging. Ecology’s choice to defer the development of a methyl mercury (tissue) criterion pending additional analysis by EPA and resolution of certain technical issues is reasonable. The existing acute and chronic aquatic life criteria for total mercury (in WAC 173-201A) are unchanged.

6) Table 240 Toxics Substances Criteria – A column should be added to Table 240 which specifies the “Recommended Analytical Protocol,” and identifies the expectations for Detection and Quantitation Levels, and instructions and qualifications, as appropriate. Consistent with WAC 173-201A-260(3)(h) these analytical methods would reference to the 40 CFR 136 methods in effect on the date of WAC 173-201A adoption.

Discussion – The regulatory effect of water quality standards depends on the numeric criteria and the ability of an analytical method to assess the presence of the pollutant in an ambient water sample at the regulatory pollutant concentration. As proposed in the

¹⁵ “*Washington State Water Quality Standards: Human Health Criteria and Implementation Tools – Overview of Key Decisions*,” WDOE Publication No. 14-10-058, January 2015

¹⁶ 40 CFR 131.5 and 40 CFR 131.6 broadly define the necessary technical and scientific elements of an approvable water quality standards submittal.

current rulemaking, there are 35 freshwater toxic pollutants where the numeric criteria proposed by Ecology are below the 40 CFR 136 method detection levels or quantification levels. The inability to detect these pollutants at the concentration of the water quality criterion means they have no practical regulatory significance. But if (or when) pollutant analytical methods are improved and adopted into 40 CFR 136, the true regulatory implications of these 2015 HHWQC will come into focus. The state of Washington will have silently “backed-into” possibly very significant regulatory requirements that may or may not be in the public interest.^{17 18}

Our comment requests that Ecology provide an APA process to announce the adoption of 40 CFR 136 changes. Those changes would be presented in amendments to Table 240. The agency should offer clear direction on its expectations for assessing toxic pollutants in ambient waters.

To summarize this very important comment, it is the HHWQC and accompanying 40 CFR 136 approved analytical method which together define the regulatory effect of the water quality standard. Ecology should specify in regulation the acceptable methodology(ies) to evaluate pollutant concentrations in ambient waters and commit to a formal regulation amendment when 40 CFR 136 methods change.

- 7) WAC 173-201A-260(3)(h) – This subsection should be amended to establish an unambiguous regulatory process requiring amendment of WAC 173-201A to announce any modification/additions to 40 CFR 136 analytical methodologies.

Discussion - Existing WAC 173-201A-260(3)(h) announces agency intentions on analytical methodologies to evaluate ambient water quality. An important amendment should be adopted

(h) The analytical testing methods for these numeric criteria must be in accordance with the “*Guidelines Establishing Test Procedures for the Analysis of Pollutants*” (40 CFR 136) or superseding methods published. The department may also approve other methods following consultation with adjacent states and with the approval of the USEPA. Any superseding methods or other methods not published in 40 CFR 136 will become effective when adopted in WAC 173-201A.

¹⁷ The example we have come to appreciate over the last three years is for Polychlorinated Biphenyls. The 40 CFR 136 approved method is EPA Method 608 (arochlors). Ecology has been selectively comfortable using the unapproved 40 CFR 136 Method 1668 for assessing PCB (congeners) in ambient water. Should Method 1668 ever be adopted in 40 CFR 136 it would have multi-billion dollar cost implications to the residents of Washington as Clean Water Act programs are implemented in the state.

¹⁸ Note that a pairing of toxic pollutant evaluation and specification of 40 CFR 136 methods is embedded in the agency’s NPDES permit program. Ecology-issued NPDES permits include an appendix titled “List of pollutants with analytical methods, detection limits and quantitation levels,” with the “Recommended Analytical Protocol,” “Detection and Quantitation Levels” specified, and other explanations and qualifications.

This regulation addition, specifying a requirement to formally adopt into Washington regulation any federal agency regulation amendments occurring in the future, is demanded by Washington case law. Three Washington Supreme Court decisions have held that the adoption of future federal rules, regulations or statutes would be an unconstitutional delegation of legislative power. (State of Washington, *Kirschner v. Urquhart*, 50 Wash.2d 131. April 1957; *Yelle v. Bishop*, 55 Wash.2d 131. December 1959; *State of Washington v. Readers Digest Association*, 81 Wash.2d 259. Sep 1972.) 40 CFR 136 is an adopted federal regulation. As that federal regulation is revised a companion revision to WAC 173-201A must occur.¹⁹

EPA's 40 CFR 136 was last amended in 2012. There is a current regulation amendment proposal available for public comment; e.g., 80 FR 8956 – 9075 (February 19, 2015). In either the addition of a column in Table 240 or amendment of WAC 173-201A-260(3)(h), Ecology could simply add language to indicate the date of last revision of 40 CFR 136, and then update and adopt future federal rule changes by reference.

- 8) WAC 173-201A-420 Variance – Weyerhaeuser appreciates the inclusion of broader regulatory languages providing for variances. A variance offers a mechanism to maintain Clean Water Act compliance while working toward ultimate achievement of more stringent HHWAC. However, the sheer complexity of the regulatory process raises questions on whether the “on-paper” benefits of a variance could ever actually be realized.

Discussion – The proposed regulatory language is an expansion of WAC 173-201A-420 *Variances*, and draws on concepts in existing 40 CFR 131.10(g) and proposed 40 CFR 131.14. As proposed, the pathway to issuance of a variance includes developing information and satisfying threshold determinations on science and technology questions, multiple regulatory determinations by Ecology, a federal/tribal agency review, amendment of WAC 173-201A and modification of an NPDES permit. This will be a formidable, resource-intensive, multi-year process. Ecology has never issued a WQS variance and the “Rule Implementation Plan: Water Quality Standards for Surface Waters of the State of Washington,”²⁰ offers minimal commentary on the success elements for issuing a variance or sense of commitment on how the agency would ever turn the concept into reality. Restating the same point, over the next 20 years it is easy to construct scenarios where issuance of a variance could be the best and perhaps only regulatory mechanism to create a confident CWA compliance status for NPDES permittees while responsible work toward water quality standards attainment proceeds. The agency should be committed to

¹⁹ This obligation to periodically update Washington environmental regulations to stay current with changing EPA rules is routine in other programs implemented by Ecology. See for example, WAC 173-400-075 *Emission standards for sources emitting hazardous air pollutants*

(1) National emission standards for hazardous air pollutants (NESHAPs). 40 C.F.R. Part 61 and Appendices in effect on July 1, 2012, are adopted by reference. (emphasis added)

²⁰ WDOE Publication 14-10-057, January 15, 2015

delivering a variance “product” in a manner which complies with the CWA, efficiently and with low transaction costs.

In general, the agency should scour the proposed -420 language to remove or simplify regulatory chaff. A specific comment would encourage Ecology to change the perspective for the WAC 173-201A-420(3) *Requirements* section describing a variance for “a water-body or stretch of water.” (subsection -420(3)(f)). This current proposed language requires that information “be provided to the department” and implies that the possible beneficiaries of a variance would do the work that seems to duplicate a TMDL evaluation and wasteload and load allocation process (“pollutant source assessment,” “permitted and non-permitted,” BMPs for all discharges, etc.). Is this what Ecology is expecting? It would be more efficient if Ecology became the proponent for a broader waterbody variance and combined the work/outcomes from the TMDL process to create the variance.

- 9) WAC 173-201A-020 Intake Credit definition and WAC 173-201A-460 Intake Credits - Subsection -460 is difficult to understand, demands a complicated regulatory process and, as such, might well erode most of the practical value ostensibly offered by the concept. Alternative language is proposed for agency consideration.

Discussion – We are encouraged at the agency’s willingness to include an Intake Credit concept in the water quality standards regulation. The public policy objective supporting the concept should be that an NPDES permittee is not responsible for pollutants taken into the facility with background/intake waters. The Intake Credit definition in subsection -020 seems to correctly capture the concept; that is, there will be an affirmative obligation to take account in NPDES permitting of a pollutant present in public waters. In simple terms, we take this to mean that a quantifiable background/intake water pollutant load will be netted out of NPDES permittee transactions (which includes a reasonable potential analysis, the possible consideration of water quality-based effluent limits, and a possible TMDL wasteload allocation). EPA models this concept very well with its consideration of intake water pollutants in setting technology-based effluent limits; i.e., “effluent limitations or standards shall be adjusted to reflect credit for pollutants in the discharger’s intake water...”²¹

The problem with the proposed -460 language is that it immediately sets out to dilute the pure regulatory intent of the intake credit concept. The proposed language establishes at least six science and regulatory hurdles that must be satisfied before intake credit relief

²¹ The EPA offers a simple approach with their language in 40 CFR 122.45(g) *Pollutants in intake water*.

(1) Upon request of the discharger, technology-based effluent limitations or standards shall be adjusted to reflect credit for pollutants in the discharger's intake water if:

(i)
(ii)

will be considered. Each of the -460(2)(a) demonstrations could be turned into major science research projects with uncertainties on how much data is necessary to satisfy the regulatory criteria (i.e. variability in ambient water quality; variability in the permittee manufacturing and treatment processes; the need for monitoring and accounting for pollutant mass/concentration in intake water(s), in the facility, at the point of discharge, at the edge of the mixing zone; etc.) These tasks will be all the more difficult given that the intake credit concept will most likely be used for toxic pollutants present at part per billion or part per trillion concentration levels. It is easy to imagine the prescriptiveness of the process and practical challenge to satisfy the listed regulatory criteria could discourage credible projects. In the end, the intended value of the intake credit concept may be more illusory than real.

Ecology's proposal on Intake Credits does not need to be wedded to the difficult and limiting language developed by other jurisdictions. Since the agency has determined the Intake Credit regulation language will not be subject to EPA review and approval, the opportunity exists to present the concept with broader ground-rules/principles, which stay true to the "net-out background pollutant" concept, and is easier to understand and apply by permittees and Ecology permit writers. Weyerhaeuser suggests the rule language presented below would better facilitate the Intake Credit concept. We request Ecology's consideration and adoption of this language in place of the currently proposed WAC 173-201A-460 *Intake Credits* and the Intake Credit definition in WAC 173-201A-020.

WAC 173-201A-460 Intake Credits

Upon request of an NPDES permit discharger, and subject to the following considerations, the determination of reasonable potential to cause or contribute to an exceedence of a narrative or numeric water quality criterion, and/or the establishment of water quality based effluent limits, shall be adjusted to reflect credit for pollutants in the dischargers' intake water.

- 1) The consideration of intake credit shall be on a pollutant-by-pollutant and discharge-by-discharge basis.
- 2) In this context "pollutants" are limited to the Toxic Substances listed in Table 240, WAC 173-201A-240.
- 3) "Intake water" is public water withdrawn from surface water, groundwater and/or purchased from a utility, and within the same water basin and proximate to the location where the NPDES permittee discharge occurs.
- 4) An "intake pollutant" is the amount of pollutant present in the intake water and is typically quantified on a mass basis.

- 5) An “intake credit” is the mass of intake pollutant which can be netted-out when conducting a reasonable potential analysis or in the development of a water quality based effluent limit, either at the point of discharge or at the edge of a mixing zone if one has been authorized by the department.
- 6) The intake pollutant quantified by NPDES permittee is subject to review and approval by the department. The department will specify how compliance with the crediting or net-out of intake pollutants will be assessed.

Other details on implementation processes would be filled in with commentary in Ecology’s Permit Writers Manual.

If the agency insists on retaining the proposed language, two modifications are requested. Proposed WAC 173-201A-460(2)(a)(v) and (vi) prohibit any increase in pollutant loading to the wastewater treatment system and then at the point of discharge. This almost fully undercuts the intake credit concept. NPDES permit “reasonable potential analyses” are evaluated at the edge of any authorized mixing zone. If a permittee can quantify the pollutant concentration/mass in the intake water source, it can be netted out in a modeling exercise (or with in situ monitoring) to reasonably understand concentration at a mixing zone boundary.

WAC 173-201A-460(2)(a)(v) should be eliminated. WAC 173-201A-460(2)(vi) should be revised to read:

(vi) For the purpose of determining water quality-based effluent limits, the facility does not increase the identified intake pollutant concentration at the point of discharge (or at the downstream edge of a mixing zone if one has been authorized) as compared to the pollutant concentration in the intake water. ~~A discharger may add mass of the pollutant to its waste stream if an equal or greater mass is removed prior to discharge, so there is no addition of the pollutant in the discharge compared to the intake water.~~

Preliminary Benefit-Cost and Least Burdensome Alternative Analyses²²

- 1) RCW 34.05.328 Significant Legislative Rules states that before adopting a rule, an agency must (among other obligations) 1) determine that the probable benefits of the rule are greater than the probable costs, and 2) determine after considering alternative versions of the rule...that the rule being adopted is the least burdensome alternative for those required to comply with it... . As previously stated, Weyerhaeuser generally supports the proposed revisions to WAC 173-201A (our General Comments 1 and 2). We take no formal position on whether Ecology’s analysis of probable benefits/probable costs, and least significant alternative rule adoption, meets the legal threshold envisioned in the SLR statute.

²² “Preliminary Cost-Benefit and Least Burdensome Alternative Analyses,” WDOE Publication No. 14-10-056, January 2015

2) This said, several comments on these two analyses are offered:

- a) Ecology chose to scope the probable benefit/probable cost analysis in a manner that will obscure the likely costs and benefits of the proposed rule as it is implemented over the next 20 years. The agency chooses a static analysis, which relies only on current NPDES permittee effluent data, data from “cleanup sites,” and ambient water quality data. The evaluation assumes no new actionable information will be developed. The result is a qualified conclusion that the proposed regulation won’t have much effect at all on the implementation of Clean Water Act programs over a 20 year period. This is illogical. Elements of a more likely scenario include improved analytical test methodologies which reveal a new set of impaired waterbodies/303(d) Category 5 listings/TMDLs/wasteload and load allocations/NPDES permitting work load/Pinto Creek implications for new/expanded dischargers, etc. NPDES permittee inability to satisfy a Reasonable Potential Analysis triggers WQBEL and demands for very expensive tertiary treatment technologies. An immediate inability of NPDES permittees to demonstrate compliance with unrealistically low HHWQC creates a demand for variances or compliance schedules. These resource-intensive regulatory processes paralyze Water Quality Program staff. Special interest groups chose to litigate important Ecology CWA actions (or inaction) based on revised HHWQC. The resulting PCHB or other court decisions stymie confident Water Quality Program implementation.
- b) Improved transparency on the benefit/cost evaluation will be accomplished if Ecology accepts Weyerhaeuser Specific Comments #6 and #7 above. The request was for the agency to adopt future changes in 40 CFR 136 analytical methodologies. Providing an APA/public involvement process will facilitate a fresh evaluation of ambient water quality data and analytical capability, and a judgment on the regulatory significance of that information. This assessment could guide Ecology decision-making on possible revisions to HHWQC, the development of variance(s) to provide time for standards-attainment actions, or other options.
- c) The Least Burdensome Alternative Analysis is weak and lacks rigor. The agency concludes the “elements of the proposed rule” result in the least burdensome regulation that meets the goals and objectives of the statute. This analysis is too narrow. There are certainly other credible alternatives beyond just tinkering with the FCR and incremental excess cancer risk levels. These might include:
 - Washington could have continued to rely on the National Toxics Rule criteria.
 - Ecology could have proposed toxic pollutant criteria based on CWA Sec 304 *National Recommended Water Quality Criteria* (existing or proposed).
 - The state could have derived HHWQC using a Probabilistic Risk Assessment approach.

Each of these approaches would yield HHWQC less burdensome²³ than the proposed regulation, be compliant with EPA regulation/guidance, fully protect human health, and meet the goals/objectives of the statute and regulation.

Rule Implementation Plan²⁴

- 1) A requirement in the Significant Legislative Rule asks for a description of the resources needed to implement and enforce the rule. Ecology's response to this directive is entirely qualitative and provides no hint of the likely work load and costs the agency will face. For example:
 - The agency acknowledges that existing ambient water quality data matched with more stringent HHWQC yields an additional 55 waterbody/pollutant combinations that will go on the Section 303(d) Category 5 list. This means an additional TMDL development workload/cost to the agency and CWA transaction implications for NPDES permittees.
 - Elements of the "more likely" scenario presented in Preliminary Benefit/Cost comment 2)a. above are simply not acknowledged.
 - There is a widespread expectation that more stringent HHWQC will (in time) create a need or reliance on the implementation tools -- variances, compliances schedules, and intake credit as mechanisms to maintain technical CWA compliance. An unequivocal statement and commitment in the Rule Implementation Plan that Ecology will make these tools work would build confidence.

Draft Environmental Impact Statement²⁵

In Human Health Criteria Alternatives (pages 18-19) the agency concludes that Alternative 1 (retain criteria from the NTR) and Alternative 2 (10e-5 excess cancer risk) may be less than fully protective because of fish consumption rate or excess cancer risk level choices. This characterization is disappointing. It simply reflects a lack of knowledge on the extraordinary conservatism built into the HHWQC deterministic derivation process these alternatives are built on.²⁶ Water Quality Program personnel know this. It is a shame that the agency presentation in this draft Environmental Impact Statement still promotes the myth that any single input variable controls the characterization of health protectiveness of the proposed HHWQC. The presentation perpetuates a misperception that consuming more than 6.5 gr/day of fish, and/or deriving HHWQC at an excess cancer risk level of 1x10e-5, will invariably lead to unacceptable individual or population health risks.

²³ "less burdensome" is assumed to mean less stringent HHWQC, and less stringent is equated with lower CWA program implementation and compliance costs over time.

²⁴ "Rule Implementation Plan – Water Quality Standards for Surface Waters of the State of Washington. Amendments to Chapter 173-201A WAC," WDOE Publication No. 14-10-057, January 15, 2015


²⁵ Draft Environmental Impact Statement - Water Quality Standards for Surface Waters of the State of Washington. Amendments to Chapter 173-201A WAC," WDOE Publication No. 14-10-057, January 15, 2015

²⁶ See the documents referenced in footnotes 3 and 8 and Ecology's own year-long set of Policy Forums.

Ms Cheryl Niemi
March 23, 2015

Thank you for the opportunities provided to Weyerhaeuser to participate in the many public involvement activities over the last several years.

Sincerely,

A handwritten signature in black ink, appearing to read "Ken Johnson", with a stylized, cursive script.

Ken Johnson
Corporate Environmental Manager